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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/458,190	12/09/1999	BRADLEY CAIN	2204/185	8564

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EXAMINER	
VO, LILIAN	

ART UNIT	PAPER NUMBER
2127	9

DATE MAILED: 10/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/458,190	CAIN, BRADLEY	
	Examiner	Art Unit	
	Lilian Vo	2127	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 July 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1 – 15 are presented for examination.

Response to Arguments

2. Applicant's arguments filed 7/28/03 have been fully considered but they are not persuasive for the reasons set forth below.

Regarding applicant's remarks, page 2, 3rd paragraph, in which the limitations of "associating a plurality of operations with a system task" or "executing the operating system task at a low priority prior to performing the selected operation" and raising the operating system task to a higher priority level in order to perform the selected operation" are not suggested in Lim's reference, the office disagrees. Lim's reference is about a system and method for arbitrating access to a shared resource among a plurality of processors (see abstract). Operating system has been known as the most important program that runs on a computer. Every general-purpose computer must have an operating system to run other programs. Conceptually, operating system controls the execution of computer programs and manages resource allocation, job control and etc... Lim discloses "...a processor 400 switches to a high-priority task or operation, that processor may increase its own priority level to a higher priority in real-time. Once the high priority operation is complete, the processor can return its priority level to the lower level previously set, or to some other level based on the priority of its new operation. Similarly, where other factors are used to set the priority, as those factors change in real-time, so can the priority of the processor

to adequately handle the processor in its current situation. In this manner, priorities can be dynamically assigned and reassigned, to more accurately reflect the importance, priority or other characteristics of the tasks, operations or applications being performed by the processors" (col. 15, lines 8 – 29). By switching to perform a high-priority task, this means the operating system task is being raised to a higher priority level in order to perform the high priority task. Furthermore, this inherently means the operating system task is being executed at a low priority prior to perform the high priority task.

Regarding applicant's remarks, page 3, lines 11 - 13, in which "Lim describes only that a priority of the processor changes, not a priority of a task as recited in the claims", the office disagrees. As stated in col. 15, lines 8 – 29, the changes in the processors' priorities are based on the priority of the task or the priority of the new operation. Furthermore, the priorities can be dynamically changed to more accurately reflect the importance, priority or other characteristics of the tasks, operations or applications being performed by the processors. Hence, it inherently discloses of detecting a trigger condition when the priority of the task changes and/or switching to perform a high-priority task.

In response to applicant's argument (page 3, lines 13 – 18) that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the plurality of routing operations" in page5, lines 5 - 6. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 2, 5 – 7, 10 - 12 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Lim (US. Pat. 6,430,640).

Regarding **claim 1**, Lim discloses a method for expediting a selected operation in a computer system (col. 15, lines 8 – 29), the method comprising:

associating a plurality of operations with an operating system task, the plurality of routing operations including the selected operation (col. 15, lines 8 – 29);

executing the operating system task at a low priority level prior to performing the selected operation (col. 15, lines 8 – 29); and

raising the operating system task to a high priority level in order to perform the selected operation (col. 15, lines 8 – 29).

Regarding **claim 2**, Lim discloses the method of claim 1, wherein raising the operating system task to the high priority level in order to perform the selected operation comprises:

detecting a trigger condition indicating that the selected operation is to be performed (col. 15, lines 8 – 29); and

raising the operating system task to the high priority level upon detecting the trigger condition (col. 15, lines 8 – 29).

Regarding **claim 5**, Lim disclose the method of claim1, further comprising:

lowering the operating system task to the low priority level upon completion of the selected operation (col. 15, lines 8 – 29).

Claims 6, 7, 10 – 12 and 15 are rejected on the same ground as stated above.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 3, 4, 8, 9, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim (US Pat. 6,430,640) in view of Applicant's admitted prior art.

Regarding **claim 3**, Lim did not clearly teach the operating system task is a routing task, and the trigger condition comprises receipt of a link state advertisement protocol message including link status information. Nevertheless, these limitations are taught in the applicant's admitted prior art, which can be found on page 1, lines 19 – 31 and page 3, lines 9 - 23. Therefore, it would have been obvious for one of ordinary skill in the art, at the time the invention was made to incorporate these features, which admitted by the applicant's prior art to Lim's invention to provide the communication network with various types of routing protocol.

Regarding **claim 4**, Lim did not clearly teach the selected operation is Dijkstra shortest path computation utilizing the link status information received in the link state advertisement protocol message. Nevertheless, this limitation is taught in the applicant's admitted prior art, which can be found on page 1, lines 19 –31. Therefore, it would have been obvious for one of ordinary skill in the art, at the time the invention was made to include this teaching, which admitted by the applicant's prior art to Lim's invention to provide the system with the capability in determining the shortest route in the communication network.

Claims 8, 9, 13 and 14 are rejected on the same ground as stated above.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilian Vo whose telephone number is (703) 305-7864.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Lilian Vo
Examiner
Art Unit 2127

lv
September 29, 2003

MAJID A. BANANKHAH
PRIMARY EXAMINER